## **Pasture Burning Season**

**AGRI-VIEWS** 

by Chuck Otte, Geary County Extension Agent

If you haven't noticed it getting a little smoky on nice clear, calm days, you soon will. We are heading into prime pasture burning season. Residents who have lived in the Flint Hills all their life just know it's going to happen. New residents may be very unfamiliar with this practice and question why the hills are going up in flames putting a lot of smoke in the air. Which gives us a perfect opportunity to talk about this today.

The first thing that you need to realize is that the prairies around the world were formed by fire. Fire is an essential part of forming AND maintaining grasslands (and many ecosystems actually.) When fire is removed from prairies in Kansas cedar trees and woody shrubs immediately start to invade. Over time they will be converted to hardwood forests with oaks, hickories and walnuts becoming dominant. Don't get me wrong, there's nothing wrong with hardwood forests, it's just that cattle eat grass, not tree leaves.

Fire is the quickest and easiest way to kill small cedar trees. Over time it also reduces existing brush invasion and helps stop new invasions. But it's more than just that. Fire is the reset button for the prairie. When cattle graze they tend to graze in patches. Then they keep going back to those patches because the grass is regrowing and the young tender shoots are tastier and more nutritious than the ungrazed plants. By the end of the grazing season you'll have virtually ungrazed areas right next to areas that were regularly eaten down. If the prairie is not burned before next season, the cattle will immediately start grazing in the areas grazed last year as they don't have to stick their heads down into all the old grass. When the prairie is burned it wipes the slate clean and the cattle will start new patches likely in different locations.

Fire doesn't hurt the grass plants regardless of the time of year that it is burned. Grasses keep their growing point below ground. Spring burning is often used so that as the new grass is growing the cattle, especially cows and calves, are out there with the new and very nutritious grass when their nutritional demands are at their highest. Matching the need of the livestock with the peak time for the grass. Early spring burns will encourage more wildflower growth while late spring burns will be harder on the woody species and favor the grass. There is growing interest now in late summer burning as a method of helping to control an invasive weed known as sericea lespedeza.

There are regulations that pasture managers have to follow however. In Geary County landowners have to have a burn permit and can only burn after receiving permission from the Rural Fire Department. If there are unfavorable weather conditions, like high wind speeds, permission to burn will not be granted. High winds and fire are a bad combination. By high winds we are generally talking over 15 mph and definitely over 20. When burning pastures you do want some wind, 5 to 15 mph and clear skies so that burns move along and the smoke can disperse.

Finally the smoke. There will be short time impairment of air quality during March and especially April. This is a problem for some people and my brother happens to be one of those people. The local, state, and federal authorities work together to monitor air quality. Tools are being developed to help pasture managers burn on days that will minimize air quality issues. In closing, there will be some smoky days ahead. Not a lot of pastures were burned last year so ranchers want to catch up. Please be patient and the air will clear up in a few weeks!